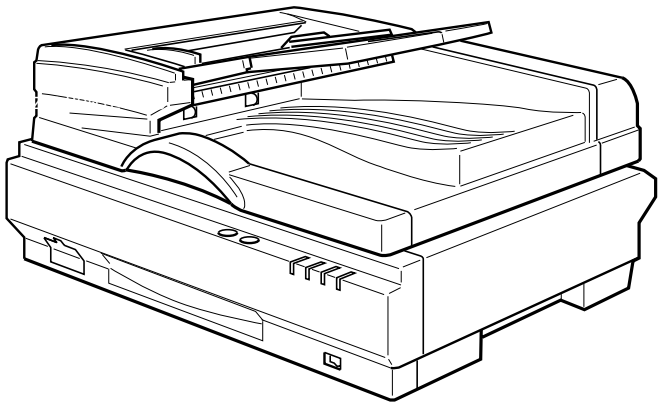
Color Scanner

Operating Instructions
Scanner Reference



Read this manual carefully before you use this product and keep it handy for future reference.
For safety, please follow the instructions in this manual.

Introduction

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

Please read the Safety Information before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

Power Source

Color Scanner: 120 V, 60 Hz, 10A or more

Please be sure to connect the Power Cord to a power source as above.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

Important

Parts of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Caution:

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Do not attempt any maintenance or troubleshooting other than that mentioned in this manual. This scanner contains a laser beam generator and direct exposure to laser beams can cause permanent eye damage.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

Ricoh shall not be responsible for any damage or expense that might result from the use of parts other than genuine Ricoh parts in your Ricoh office product.

Trademarks

Microsoft®, Windows® and Windows NT® are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights in those marks.

Notes:

Some illustrations might be slightly different from your machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Note

The proper names of the Windows operating systems are as follows:

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft® Windows® Millennium Edition (Windows Me) operating system
- Microsoft® Windows® 2000 Professional
- Microsoft® Windows® 2000 Server
- Microsoft® Windows NT® Server operating system Version 4.0
- Microsoft® Windows NT® Workstation operating system Version 4.0
- Microsoft® Windows NT® Server network operating system version 3.51
- Microsoft® Windows NT® Workstation operating system version 3.51

Safety Information

When using your scanner, the following safety precautions should always be followed.

Safety During Operation

In this manual, the following important symbols are used:

> ⚠ ***WARNING:***
> ***Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.***
>
> ⚠ ***CAUTION:***
> *Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.*

⚠ *WARNING:*

- Connect the Power Cord directly into a wall outlet and never use an extension cord.
- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.
- To avoid hazardous electric shock or laser radiation exposure, do not remove any covers or screws other than those specified in this manual.
- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following conditions exists:
  - You spill something into the equipment.
  - You suspect that your equipment needs service or repair.
  - Your equipment's cover has been damaged.
- Disposal can take place at our authorized dealer or at appropriate collection sites.

⚠ *CAUTION:*

- Protect the equipment from dampness or wet weather, such as rain, snow, and so on.
- Unplug the Power Cord from the wall outlet before you move the equipment. While moving the equipment, you should take care that the Power Cord will not be damaged under the equipment.
- When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).
- Do not allow paper clips, staples, or other small metallic objects to fall inside the equipment.
- For environmental reasons, do not dispose of the equipment or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer or at appropriate collection sites.
- The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise it could cause a personal burn.
- Our products are engineered to meet high standards of quality and functionality, and we recommend that you only use the expendable supplies available at an authorized dealer.

Lithium Batteries (Memory Back-up)

⚠ *WARNING:*

- Do not try to replace the lithium batteries by yourself. A battery of this type can explode if incorrectly replaced. If the lithium batteries need to be replaced, contact an authorized dealer to request servicing.
- Never dispose of the lithium batteries by incineration. This can cause them to rupture resulting in injury.

Note

❒ Please return used NIC boards to our authorized dealer or service representative. Your cooperation with our recycling activities is appreciated.

❒ NIC boards are equipped with a lithium battery. In the case NIC boards are disposed of by the customer, please dispose them in accordance with national or local regulations after separating the lithium batteries from the NIC board.

Energy Star Program



As an ENERGY STAR Partner, we have determined that this machine model meets the ENERGY STAR Guidelines for energy efficiency.

The ENERGY STAR Guidelines intend to establish an international energy-saving system for developing and introducing energy-efficient office equipment to deal with environmental issues, such as global warming.

When a product meets the ENERGY STAR Guidelines for energy efficiency, the Partner shall place the ENERGY STAR logo onto the machine model.

This product was designed to reduce the environmental impact associated with office equipment by means of energy-saving features, such as Low-power mode.

❖ Energy Saver mode

This unit automatically lowers its power consumption at a predetermined time (approximately 15 minutes) after the last operation was performed. To operate the unit from this mode, see the instructions below.

- Method for clearing
  - Put a document on the Document Tray.
  - Open the cover of the Automatic Document Feeder (ADF).
  - Open the White Sheet cover.
  - Follow the instructions from the PC.

Note

❒ The Energy Saver mode does not work in the following conditions.

- When an optional device is attached.
- When an error occurs.
- When a document is placed on the Document Tray.

❖ Specifications

Energy Saver mode	Power Consumption	Approx. 11W
	Default Time	15 minutes

Manuals for This Scanner

Manuals for This Scanner

The following manuals describe the operational and maintenance procedures of this machine.

To enhance safe and efficient operation of this scanner, all users should read and follow the instructions carefully.

❖ **Quick Installation Guide**
Describes how to install the scanner.

❖ **Setup Guide**
Provides information about setting up the scanner and its options. This manual is provided as a printed manual, and also as a PDF file on the CD-ROM.

❖ **Scanner Reference(this manual)**
Provides information about using the scanner. This manual is provided as a PDF file.

❖ **Network Interface Kit Installation Guide**
Describes how to install the Network Interface Kit (Network Interface Board Type S and Operation Unit).

Note

❒ There is a CD-ROM that comes with this scanner.

How to Read This Manual

Symbols

In this manual, the following symbols are used:

⚠ ***WARNING:***
This symbol indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

⚠ ***CAUTION:***
This symbol indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

* The statements above are notes for your safety.

Important
If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

Preparation
This symbol indicates the prior knowledge or preparations required before operating.

Note
This symbol indicates precautions for operation, or actions to take after misoperation.

Limitation
This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

Reference
This symbol indicates a reference.

[ ]
Keys that appear on the machine's panel display.

Keys and buttons that appear on the computer's display.

【 】
Keys built into the machine's operation panel.

Keys on the computer's keyboard.

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1. Setting the Document

This chapter describes the methods used for setting documents on this unit for scanning.

The document can be set on the Contact Glass or the Automatic Document Feeder (ADF). For scanning multiple documents in a row, the Automatic Document Feeder (ADF) is convenient.

Size of Documents that can be Set

Position for setting document	Size of document	Document weight
Contact Glass	Maximum A3 , 11×17 (DLT)	No restrictions
Automatic Document Feeder (ADF)	❖ **Standard size** Max. A3⧉, 11″×17″⧉ Min. A5⧉, 8.5″×5.5″(HLT)⧉ ❖ **Non-standard size** Max:297mm(11.7″)×2000mm(78.8″)(when scanning in binary), 297mm(11.7″) × 630mm(24.9″) (when scanning in color) Min: 105mm(4.1″) × 128mm(5.0″)	41(1.4oz)~128g(4.5oz)/m^2 (35~110Kg(77.2~242.5lb))

Document Sizes that can be Scanned Automatically

The sizes of documents that this unit can automatically detect and scan are as follows.

❖ **Contact Glass (Metric version)**

	Feed direction	Size (mm)
A3	⧉	297 × 420
B4	⧉	257 × 364
A4	⧉	210 × 297
	⧉	297 × 210
B5	⧉	182 × 257
	⧉	257 × 182

1

	Feed direction	Size (mm)
Foolscap (F4, 8.5" × 13")	⬜	216 × 330
F/GL (8" × 13")	⬜	203 × 330 **Note** ❒ F/GL size is detected same as the F4 size.

❖ Contact Glass (Inch version)

	Feed direction	Size (inch)
Double Letter (DLT)	⬜	11" × 17"
11″× 15″	⬜	11" × 15" **Note** ❒ This size is detected same as DLT size.
10″× 14″	⬜	10" × 14"
Legal (LG)	⬜	8.5"× 14"
Letter (LT)	⬜	8.5" × 11"
	⬜	11" × 8.5"
8″× 10″	⬜	8" × 10"

❖ Automatic Document Feeder (ADF)(Metric version)

	Feed direction	Size (mm)
A3	⬜	297 × 420
B4	⬜	257 × 364
A4	⬜	210 × 297
	⬜	297 × 210
B5	⬜	182 × 257
	⬜	257 × 182

	Feed direction	Size (mm)
A5		148 × 210
		210 × 148
Foolscap (F4, 8.5" × 13")		216 × 330 **Note** ❒ Foolscap size is detected same as the F/GL size.
F/GL (8" × 13")		203 × 330

❖ Automatic Document Feeder (ADF)(Inch version)

	Feed direction	Size (inch)
Double Letter (DLT)		11" × 17"
11″× 15″		11" × 15" **Note** ❒ This size is detected same as the DLT size.
10″× 14″		10" × 14"
Legal (LG)		8.5"× 14"
F/GL		8"× 13" **Note** ❒ This size is detected same as the LG size.
Letter (LT)		8.5" × 11"
		11" × 8.5"
8″× 10″		8" × 10" **Note** ❒ This size is detected same as the LT size.
Half Letter(HLT)		5.5" × 8.5"
		8.5" × 5.5"

Documents that Require Special Care

Make sure to take care in setting the document according to the following instructions when scanning the following types of documents.

❖ Documents whose size is difficult to scan

As the following documents are difficult to scan their size, the correct size will not be selected, even if the automatic size detection has been set. The sizes for these documents should be manually set.

- Documents with projecting parts such as indices or attached lines
- Document with a high degree of transparency such as tracing paper or OHP film
- Documents which are fully dark in color or which have a high content of character or graphic patterns
- Documents with partially adhesive areas
- Documents with surrounding adhesive areas

❖ Documents that cannot be set into the Automatic Document Feeder (ADF)

The following types of documents should not be set into the Automatic Document Feeder (ADF) as these can cause paper jams, damage to the original document, or black and white lines. If these types of documents are to be used, use the Contact Glass of the scanner.

- Documents with staples or paper clips
- Documents with holes and rips
- Documents with bends, folds or wrinkles
- Pasted documents
- Thermal paper, art paper, aluminum foil, carbon paper, or processed paper with conductive paper on the back
- Perforated paper
- Documents with projecting parts such as indices or attached lines
- Documents that do not slide easily such as tracing paper (translucent paper)
- Documents that are thin and soft, such as registration paper
- Documents that have an unsuitable thickness such as postcards
- Documents that are bound such as books
- Documents that have a high transparency rate such as OHP film or tracing paper
- Documents with not completely dried ink or correction liquid

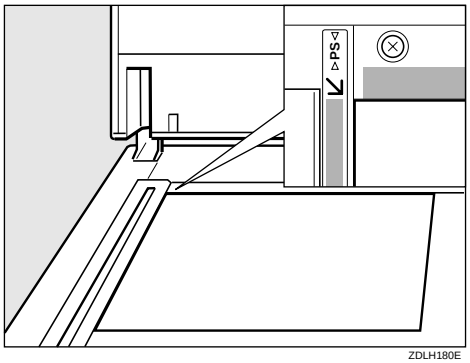
Placing the Document on the Contact Glass

Important

❒ Take care that your fingers do not get caught when closing the Automatic Document Feeder (ADF).

1 **Open the Automatic Document Feeder (ADF).**

2 **Place documents face down and aligned with the scale.Documents should conform to the setting standards.**



Important

❒ Do not forcefully press down on the Contact Glass. If a strong force is applied to a small area, the glass may be break.

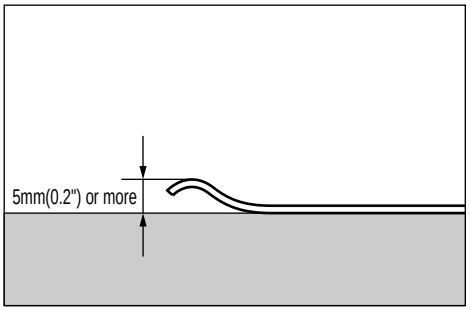
3 **Carefully close the Automatic Document Feeder (ADF).**

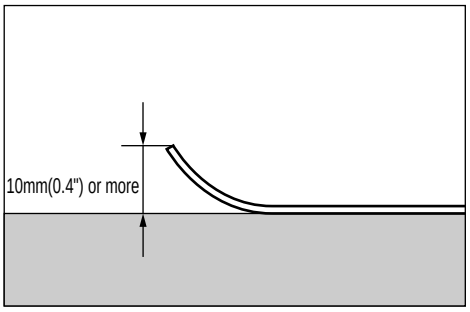
Setting Documents in the Automatic Document Feeder (ADF)

Multiple documents can be set in the automatic document feeder(ADF). In this manual, documents that can be set in the Automatic Document Feeder (ADF) are called "sheet documents". Not only can documents set in the Automatic Document Feeder (ADF) be scanned on one side, they can be scanned on both sides.

❖ Documents that cannot be set in the Automatic Document Feeder (ADF)

- Documents that do not match the size and paper weight of documents that can be set
- Documents with staples, clips, glue, etc.
- Documents with holes and rips
- Documents with bends, folds, and wrinkles
- Pasted documents
- Wet documents
- Documents not made of paper
- Documents with coating (CFF, etc.)
- Photos, documents that are prints or printed photos
- Thermal fax paper, art paper, aluminum foil, carbon paper, processed paper with conductive paper on the back
- Documents with projecting parts such as indices or attached lines
- Documents that do not slide easily such as tracing paper (translucent paper)
- Documents that are thin and soft, such as registration paper
- Documents that have an unsuitable thickness such as postal cards
- Documents that are bound, such as books
- Documents that are transparent such as OHP film,or tracing paper
- Documents that have curls such as shown in the illustration below





Important

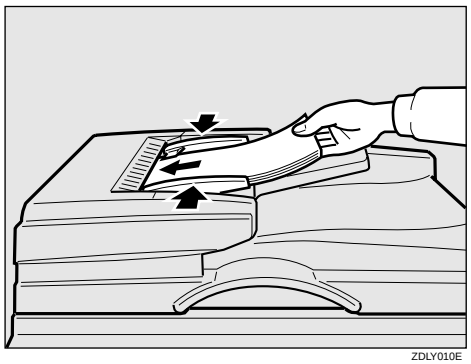
❒ Setting documents that should not be set in the Automatic Document Feeder (ADF) can cause jams and break downs. Place these documents on the Contact Glass.

❖ Advice when Setting documents in the Automatic Document Feeder (ADF)

- Do not set more documents than indicated.
- For document sizes that can be automatically detected, refer to P.1 *"Document Sizes that can be Scanned Automatically"*.

Simples Scanning

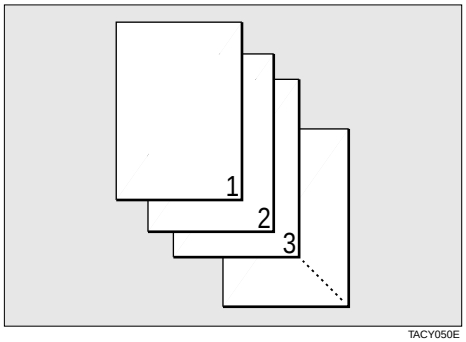
1 **Set the documents into the Automatic Document Feeder (ADF) with the side to be scanned face up.**



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Note

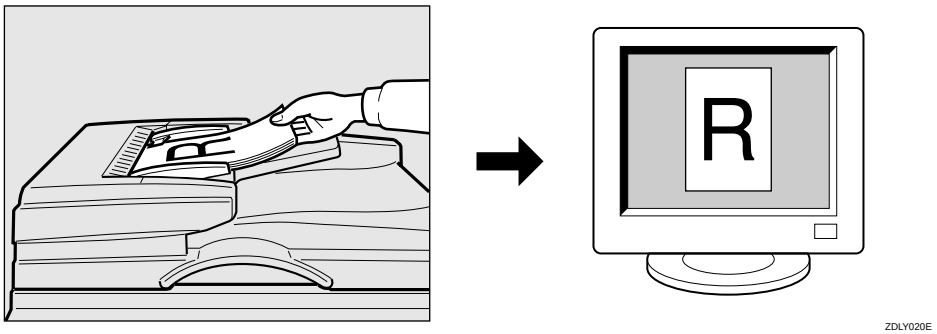
❒ Arrange the documents in the preferred order.



TACY050E

❒ To avoid multiple sheet feeds (in which the ADF feeds more than one sheet at a time), fan the pages of the document before setting them in the Automatic Document Feeder (ADF).

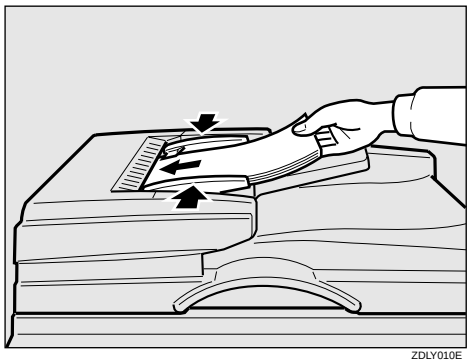
❒ Set the document in the direction shown in the illustration to scan with the proper orientation.



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Duplex Scanning

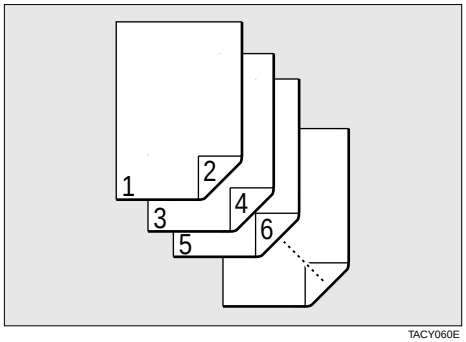
1 **Set the documents in the Automatic Document Feeder (ADF) with the side to be scanned first (the front side of the document) face up, and align the document guide with the size of the documents.**



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Note

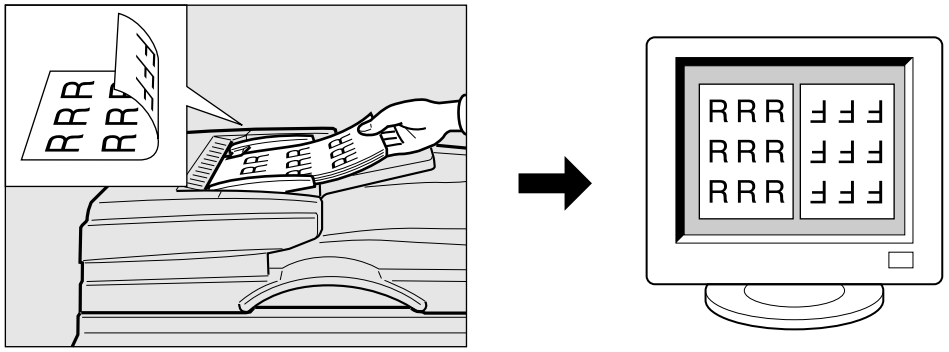
❒ Arrange the sheets of the documents in the order to be scanned.



TACY060E

❒ To avoid multiple sheet feeds (in which the ADF feeds more than one sheet at a time), fan the pages of the document before setting them in the Automatic Document Feeder (ADF).

❒ When setting the front side of the page as in the illustration, the back side is scanned upside.



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2. Scanning Documents

General Scanning Method

Scanning of a document is initiated by the software that is TWAIN or ISIS compatible. The method of operation depends on the software. For details, refer to the manual that was supplied with your software.

Limitation

- ❒ When using duplex scanning, if the leading edge of the reverse side of the document is dark, the scanned image may appear whitish.
- ❒ When using the ISIS Driver, the image resolution will be limited. If the scanning image is smaller than the size set with the ISIS Driver, lower the resolution (at maximum 675 dpi) using the resolution settings and the area.

Manual Scanning

By setting up a scanner driver that supports the manual scanning function, scanning can be initiated by pressing the【Start】key.

If the manual scanning function is used, then communications between the scanner and the personal computer are no longer needed in cases where it is necessary to set the document in the scanner one sheet at a time, for example.

1 Set the manual scanning function through the scanner driver.

2 Set the documents in the scanner.

3 Press the【Start】key. To end manual scanning, press the【Reset】key.

The Relationship between the Data Size and the Scanning Area, as well as the Resolution

The resolution and the scanning area as well as the data size are all affected in the following way.

- When the resolution (dpi) is set to a high value, the data size becomes larger and the scanning area which can be set becomes smaller.
- When the scanning area is set larger, the data size becomes larger, and the resolution becomes lower.

Note

❒ The size of the scanning area is the standard.

❒ Scanning is not possible when there are blank fields in the setting.

❒ A data size that works with applications and a data size that can scan with a scanner driver are different. For a data size that can work with applications, refer to the manuals that came with each of the applications.

When in [Binary] [half-tone] is Selected

Paper size	Width (mm / inch)	Height (mm / inch)	Resolution(dpi)						
			100	200	400	600	1200	2000	2400
A3	297/11.7	420/16.5	236	943	3772	8487	33968	94398	135942
A4	210/8.3	297/11.7	118	470	1886	4247	16991	47181	67969
A5	148/5.8	210/8.3	58	234	940	2117	8468	23511	33870
A6	105/4.1	148/5.8	29	117	469	1058	4233	11755	16935
B4	257/10.1	364/14.3	176	705	2827	6365	25475	70785	101948
B5	182/7.2	257/10.1	88	354	1415	3183	12734	35393	50972
B6	128/5.0	182/7.2	43	175	703	1583	6339	17619	25386
11×17	279/11.0	432/17.0	227	910	3647	8201	32826	91216	131353
LG	216/8.5	356/14.0	145	580	2327	5231	20940	58170	83800
LT	216/8.5	279/11.0	114	455	1823	4099	16412	45588	65676
5.5×8.5	140/5.5	216/8.5	56	227	913	2058	8231	22870	32955
Long	297/11.7	2000/78.7	1123	4491	17963	40416	161755	—	—

Numerical Value: Data Size (Unit = KB)

When [gray-scale] is Selected

Paper size	Width (mm / inch)	Height (mm / inch)	Resolution(dpi)						
			100	200	400	600	1200	2000	2400
A3	297/11.7	420/16.5	1887	7551	30209	67965	—	—	—
A4	210/8.3	297/11.7	943	3774	15104	33979	135939	—	—
A5	148/5.8	210/8.3	469	1881	7525	16934	67742	188166	—
A6	105/4.1	148/5.8	235	940	3761	8467	33868	94077	135484
B4	257/10.1	364/14.3	1415	5662	22654	50967	203883	—	—
B5	182/7.2	257/10.1	707	2831	11327	25483	101942	—	—
B6	128/5.0	182/7.2	352	1409	5640	12691	50774	141033	203094
11 ×17	279/11.0	432/17.0	1823	7294	29185	65668	—	—	—
LG	216/8.5	356/14.0	1163	4653	18619	41897	167589	—	—
LT	216/8.5	279/11.0	911	3646	14590	32834	131347	—	—
5.5×8.5	140/5.5	216/8.5	457	1829	7320	16477	65907	183074	—
Long	297/11.7	432/17.0	1941	7765	31072	69903	—	—	—

Numerical Value: Data Size (Unit = KB)

When [8 Colors] [8 Colors (half-tone) is Selected

Paper size	Width (mm / inch)	Height (mm / inch)	Resolution(dpi)						
			100	200	400	600	1200	2000	2400
A3	297/11.7	420/16.5	943	3775	15101	33977	135929	—	—
A4	210/8.3	297/11.7	471	1886	7550	16989	67963	188793	—
A5	148/5.8	210/8.3	235	939	3762	8467	33871	94075	135484
A6	105/4.1	148/5.8	117	470	1879	4233	16934	47033	67735
B4	257/10.1	364/14.3	707	2830	11324	25483	101933	—	—
B5	182/7.2	257/10.1	353	1415	5663	12739	50971	141593	203892
B6	128/5.0	182/7.2	176	704	2818	6344	25383	70516	101547
11×17	279/11.0	432/17.0	911	3647	14589	32834	131343	—	—
LG	216/8.5	356/14.0	581	2327	9307	20949	83794	—	—
LT	216/8.5	279/11.0	456	1823	7293	16417	65673	182416	—
5.5×8.5	140/5.5	216/8.5	228	915	3660	8236	32954	91529	131821
Long	297/11.7	432/17.0	970	3883	15533	34947	139814	—	—

Numerical Value: Data Size (Unit = KB)

When [256 colors] is Selected

Paper size	Width (mm / inch)	Height (mm / inch)	Resolution(dpi)						
			100	200	400	600	1200	2000	2400
A3	297/11.7	420/16.5	1887	7551	30209	67965	—	—	—
A4	210/8.3	297/11.7	943	3774	15104	33979	—	—	—
A5	148/5.8	210/8.3	469	1881	7525	16934	67742	—	—
A6	105/4.1	148/5.8	235	940	3761	8467	33868	—	—
B4	257/10.1	364/14.3	1415	5662	22654	50967	—	—	—
B5	182/7.2	257/10.1	707	2831	11327	25483	—	—	—
B6	128/5.0	182/7.2	352	1409	5640	12691	50774	—	—
11×17	279/11.0	432/17.0	1823	7294	29185	65668	—	—	—
LG	216/8.5	356/14.0	1163	4653	18619	41897	—	—	—
LT	216/8.5	279/11.0	911	3646	14590	32834	—	—	—
5.5×8.5	140/5.5	216/8.5	457	1829	7320	16477	65907	—	—
Long	297/11.7	432/17.0	1941	7765	31072	69903	—	—	—

Numerical Value: Data Size (Unit = KB)

When [16,770,000 colors] is selected

Paper size	Width (mm / inch)	Height (mm / inch)	Resolution(dpi)						
			100	200	400	600	1200	2000	2400
A3	297/11.7	420/16.5	5661	22652	90626	203894	—	—	—
A4	210/8.3	297/11.7	2829	11322	45313	101937	—	—	—
A5	148/5.8	210/8.3	1408	5642	22574	50801	203225	—	—
A6	105/4.1	148/5.8	704	2819	11284	25401	101603	—	—
B4	257/10.1	364/14.3	4244	16986	67961	152900	—	—	—
B5	182/7.2	257/10.1	2121	8493	33981	76450	—	—	—
B6	128/5.0	182/7.2	1055	4228	16919	38074	152321	—	—
11×17	279/11.0	432/17.0	5469	21881	87555	197005	—	—	—
LG	216/8.5	356/14.0	3489	13960	55857	125692	—	—	—
LT	216/8.5	279/11.0	2734	10937	43771	98502	—	—	—
5.5×8.5	140/5.5	216/8.5	1372	5488	21960	49431	197722	—	—
Long	297/11.7	432/17.0	5822	23296	93216	209710	—	—	—

Numerical Value: Data Size (Unit = KB)

3. Troubleshooting

This section explains the possible causes and actions to take when the scanner does not scan an image in the expected manner or when the indicators of this unit show an error reading.

When Scanning does not Start

The interface cable is not correctly connected	• Use a suitable interface cable. • Make sure that the interface cable is properly connected.
The locking switch is in the locked position.	• When scanning does not start and a strange noise can be heard when switching on the power, the locking switch at the left side of the main unit is in the locked position. Turn the switch to **【Unlock】**.
The power can not be switched on	• First make sure the power plug is inserted into a household outlet; then set the Power Switch to ON.
No document is set	• Set a document on the Contact Glass or in the Automatic Document Feeder (ADF).
The unit is not recognized as an SCSI device	• First switch on the power of the scanner, then the power of the PC. • When changing the SCSI ID while the power is on, press the Hard Reset Switch. • Make sure the SCSI ID is correctly set. • Make sure the cable is properly connected.

When Scanning is not Performed as Expected.

The scanned image is dirty	• The Contact Glass, the ADF Contact Glass, the White Sheet or the Document Roller is dirty. ⇒ P.21 *"Cleaning"* • Clean the Contact Glass, the ADF Contact Glass, the White Sheet and the Document Roller. ⇒ P.21 *"Cleaning"*
The scanned image is distorted or out of position	• The document was moved while being scanned. Do not move the document during scanning. • The document is not pressed flat against the Contact Glass. Make sure the document is pressed flat against the Contact Glass. • Be sure to tightly align the guide of the Automatic Document Feeder (ADF) with the size of the document.
The scanned image is upside down	• The document was placed upside down. Set the document in the correct direction.
The document image cannot be scanned	• The document was placed with the front and back reversed. Set the document in the correct direction. • When setting documents on the Contact Glass, place the side to be scanned face down; when setting documents in the Automatic Document Feeder (ADF), set the side to be scanned face up. • Make sure the locking switch is in the unlocked position.
The horizontal and vertical ratios of the image do not coincide	• Assign the same values to X and Y using the resolution settings.
The scanning image is smaller that the size set by the ISIS Driver	• Values which go over the limits of the hardware, have been set in the area and resolution settings. Re-set the resolution by assigning lower values.
Dirt sticks to the document	• Clean the Feed Roller, Document Roller and Document Rolling Unit. ⇒ P.21 *"Cleaning"*

When the Indicators Show an Error Reading

This section explains the meaning of error readings displayed on the indicator of this unit and the measures to be taken.

Note

❒ If an error that is not shown in the previous table occurs, switch off the unit and then switch the power back on. If the error reading has not disappeared, contact your nearest service shop and give a description of the error reading.

				Error description	Solution
☆	-	-	☆	The Automatic Document Feeder (ADF) or its cover is not fully closed.	Close the Automatic Document Feeder (ADF) or its cover fully.
☆	-	★	☆	A document is jammed inside the Automatic Document Feeder (ADF).	Remove the jammed document.
☆	-	☆	☆	The document is not transported by the Automatic Document Feeder (ADF) in the expected way.	Remove the document that was not transported correctly.
★	★	★	★	System error	Contact your nearest service shop.

☆:On

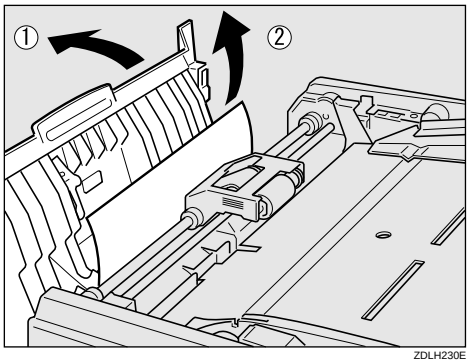
★:Blinking

-:Off

When a Document is Jammed inside the Automatic Document Feeder (ADF)

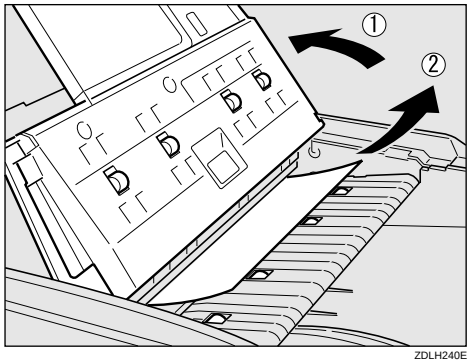
Follow the procedure below when a document is jammed inside the Automatic Document Feeder (ADF).

1 **Open the cover of the Automatic Document Feeder (ADF). If there is a jammed document, remove it.**



ZDLH230E

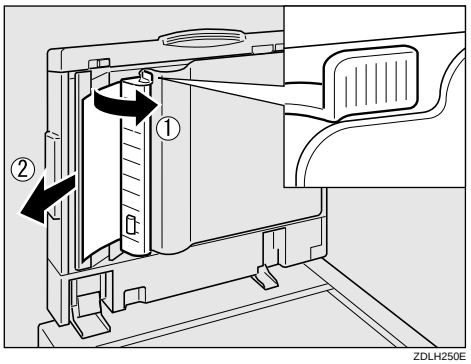
2 **Open the Document Tray. If there is a jammed document, remove it.**



ZDLH240E

3 **Open the Automatic Document Feeder (ADF).**

4 **Lower the green knob. If there is a jammed document, remove it.**



ZDLH250E

5 **Close the Automatic Document Feeder (ADF).**

Cleaning

⚠ *WARNING:*

- Never remove any covers or screws other than those specified in this manual. The inside of the scanner contains high-voltage components that can cause electrical shock. Have all inspections, adjustments, and repairs inside the scanner performed by an authorized dealer only.
- Do not attempt to modify this scanner in any way. Modification can cause fire or electrical shock.

⚠ *CAUTION:*

- When disconnecting the power cord, always make sure to hold onto the plug. Do not pull on the power cord itself. This can cause damage to the cord, fire or electrical shock.

We recommend periodically cleaning the scanner to ensure that it is in optimum operating condition. First, wipe off the scanner with a dry, soft cloth. Next, dampen a soft cloth with water, wring it out tightly, and then wipe off the scanner. Use a neutral detergent for exterior portions of the scanner where soiling cannot be removed with water alone. Wipe off the rubber rollers with ethyl alcohol, and then wipe with a cloth dampened with water. Finally, wipe off the rollers and exterior with a dry cloth to remove any excess moisture.

Important

❒ Do not use volatile chemicals such as benzene, paint thinner or spray with insecticides. This can cause deformation, discoloration and cracking.

❒ Wipe off the Automatic Document Feeder (ADF) with a dry, clean cloth when there is dust or soiling present inside.

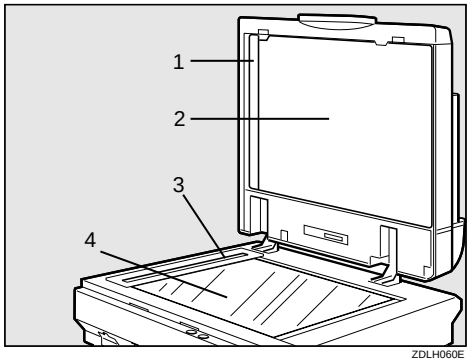
Cleaning the Contact Glass, ADF Contact Glass, White Sheet, and White Plate

⚠ *CAUTION:*

- Be careful not to pinch your fingers when closing the Automatic Document Feeder (ADF).

1 **Turn off the power of the scanner and unplug the power cord from the outlet.**

2 **Wipe off the scanner with a dry, soft cloth.**



1. **White Plate**

2. **White Sheet**

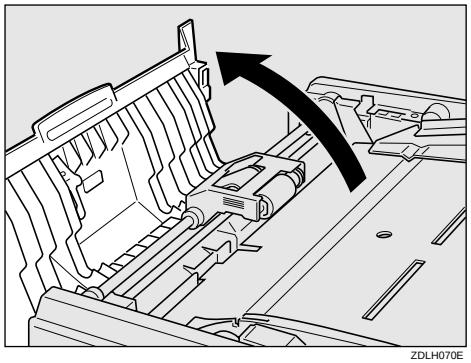
3. **ADF Contact Glass**

4. **Contact Glass**

Cleaning the Feed Roller

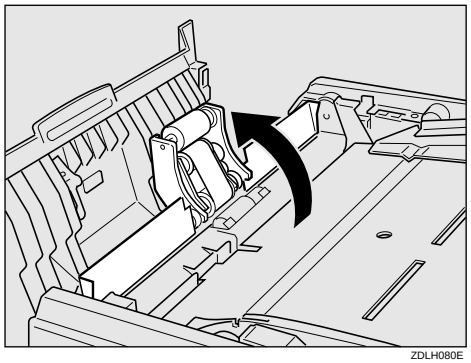
1. **Turn off the power of the scanner and unplug the power cord from the outlet.**

2. **Open the cover of the Automatic Document Feeder (ADF).**



ZDLH070E

3. **Open the roller unit. While turning it with your fingers, wipe off the Feed Roller with a tightly wrung out cloth dampened with water .**



ZDLH080E

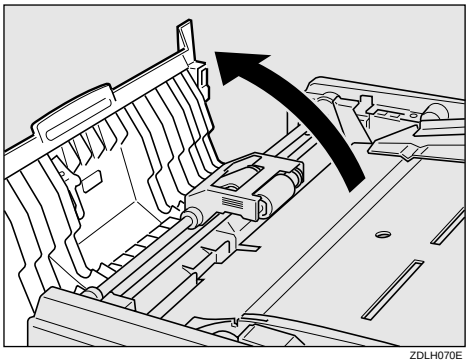
Note

❒ Always make sure to clean the Feed Roller after scanning a document written in pencil or other material that is not firmly fixed to the paper. Failure to clean the Feed Roller can cause soiling of the next document scanned.

Cleaning the Document Roller

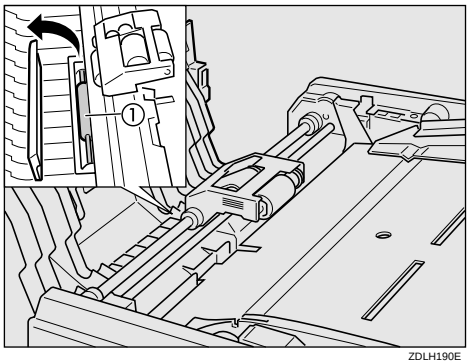
1. **Turn off the power of the scanner and unplug the power cord from the outlet.**

2. **Open the cover of the Automatic Document Feeder (ADF).**



ZDLH070E

3. **While turning it with your fingers, wipe off the Document Roller (①) with a tightly wrung out cloth dampened with water.**

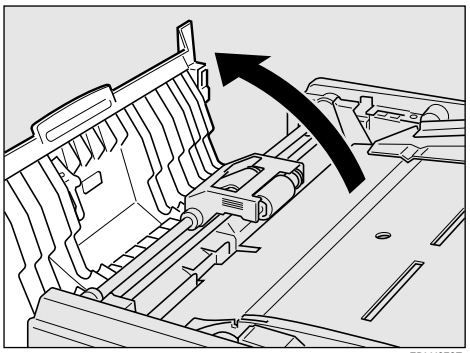


ZDLH190E

Cleaning the Document Rolling Unit

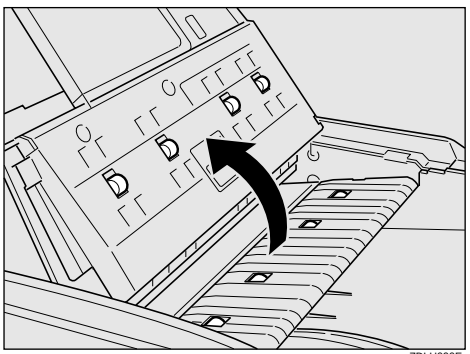
1. **Turn off the power of the scanner and unplug the power cord from the outlet.**

2. **Open the cover of the Automatic Document Feeder (ADF).**



ZDLH070E

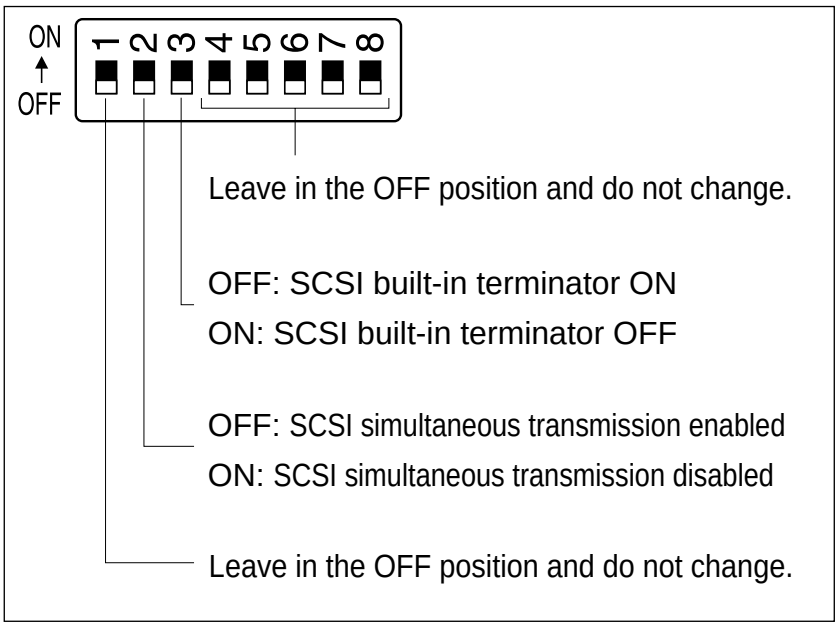
3. **Open the Document Tray and wipe off the Document Rolling Unit with a tightly wrung out cloth dampened with water.**



ZDLH090E

Setting of the DIP Switches

Only the settings for 2 or 3 DIP Switches can be changed for this unit. Do not make other changes.



Important

- Depending on the SCSI cable used, there is a possibility of malfunction during simultaneous transmission. In this case, set the 2nd DIP switch to ON (SCSI :simultaneous transmission disabled).
- When switching off the SCSI built-in terminator, set the 3rd DIP switch to ON (SCSI built-in terminator OFF).

Moving and Transporting the Scanner

⚠ ***CAUTION:***

- This scanner weighs approximately 28 kg.
- When lifting, please make sure to lift slowly so as to minimize physical strain with two persons or more while holding onto the handles located in the center on both sides. Failure to lift using proper caution, reckless handling or allowing the scanner to drop can cause injury.
- When transporting over long distances, please consult an authorized dealer.

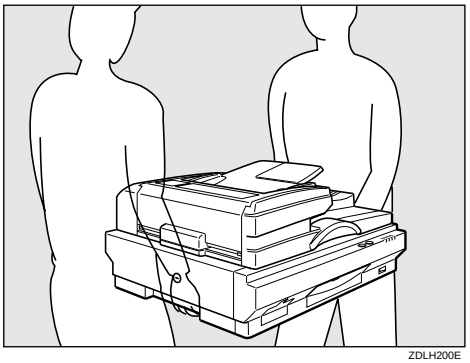
- Safety laws and regulations (including those stipulating radio wave regulations and material regulations) differ in each country. Use of this product and its consumable supplies, etc. in foreign countries in violation of these regulations may be punishable by law.
- Information regarding measures for ensuring safe transport can be obtained from an authorized dealer. However, packaging and transport are to be performed by the customer.

Moving Over Short Distances

1 Turn off the power of the scanner and unplug the power cord from the outlet.

2 Disconnect all cables connected to the scanner.

3 Transport the scanner.



ZDLH200E

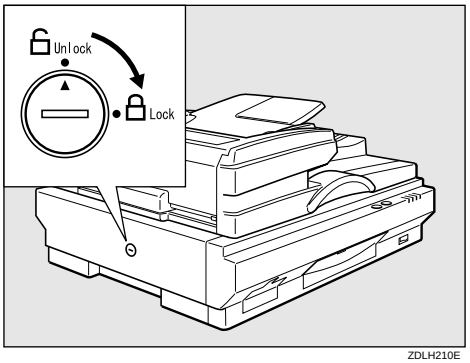
Important

❒ Try to keep the scanner as level as possible during transport.

Transporting the Scanner

1 **Turn on the Power Switch. Allow the scanner to remain on for at least 20 seconds, and then turn it off.**

2 **Set the Lock Switch on the left side of the scanner to the 【Lock】 position.**



ZDLH210E

3 **Place the scanner in the original box and transport.**

Important

- ❒ Disconnect all cables connected to the scanner.
- ❒ This scanner is a precision device. Be careful so that it is not damaged during transport.
- ❒ Use the cushioning materials provided with the scanner at the time of purchase.

Discarding the Unit

When you want to discard the unit, consult the shop where you purchased the unit or a service shop .

Precautions Concerning the IEEE1394 Interface

Please take the following precautions when using the IEEE1394 interface for scanning with this unit.

- If the power of this unit is switched OFF when the Scanner driver is being accessed or if the power is OFF when the Scanner driver is started up, the PC will freeze. When scanning using the IEEE1394 interface, do not switch OFF the power of this unit. Always make sure the power of this unit is switched ON before scanning.
- When multiple IEEE1394 compatible devices are connected with multiple PC's, the operation of the scanner may become unstable. Please confirm proper operation of the scanner when connecting multiple IEEE1394 compatible devices.
- If an IEEE1394 device is detached while scanning is being performed or data is being transmitted, the scanning or transmitting will be interrupted. Connect the IEEE1394 compatible device and switch the power on or off only when the machine is in standby mode.
- Up to 4 PC's can be logged in simultaneously.
- IEEE1394 Interface can only be available on WindowsMe, Windows2000.
- The TWAIN Driver can only be used when the scanner is connected to a computer via an IEEE1394 Interface. An ISIS Driver can only be used with a SCSI connection.

Specifications

Model	Desktop flatbed scanner	
Scanning methods	Fixed document scanning and moving document scanning	
Scanning area	• Contact Glass Main-direction : 300mm (11.8″) Max. Sub-direction : 432mm (17.0″) Max.	• ADF Main-direction: 297mm (11.7″) Max. Sub-direction: 2000mm (78.7″) Max. (When scanning 1-sided binary) 630mm (24.8″) Max. (When scanning 1-sided color) 432mm (17.0″) Max. (When scanning 2-sided)
Resolution	Main scanning: 600dpi Sub scanning: 600dpi	
Grey scale	Input: 12 bit per color/pixel Output: 8 bit per color/pixel	
Color	Output: RGB, sRGB	
Scanning time:	Binary: 0.605msec/line Color: 1.815msec/line	
Scanning speed	Binary: 30 ppm (when using SCSI-2/3 (Ultra-SCSI) connection) Color: 10 ppm (when using SCSI-2/3 (Ultra-SCSI) connection)	
Warm-up time	Max. 20 seconds	
Interface	SCSI-2/3 50-pin half-pitch (pin-type) × 2	
Power	120 V, 60 Hz, 2A	
Power consumption	• With full option During standby: 60W During operation: 140W	• Without options During Low Power mode: 12W or less During standby: 40W During operation: 110W
Size	590×546×265mm (23.2″×21.5″×10.4″)(W×D×H) (incl. ADF)	
Weight	28kg(61.7lb)	

Options

❖ Expansion interface board

- IEEE1394 Interface Board Type S
  This allows a connection to be made between this unit and a PC using an IEEE1394 interface.

❖ Expansion function board

- Image Processing Unit Type A
  Allows high-grade image processing including automatic dynamic thrsh-old mode and auto photo letter separation

❖ Network Interface Kit

- Network Interface Kit Type S
  This allows a scanner to be shared by multiple personal computers via the Ethernet (TCP/IP).

Note

❒ The Network Interface Kit will be commercially available a various times depending on the area. Contact your local dealer about the release information.

❖ Memory unit

- Memory Unit Type B (32MB)
- Memory Unit Type B (64MB)
- Memory Unit Type B (128MB)

Note

❒ These Memory Units are options for the Network Interface Kit.

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Warning, ii

Note to users in the United States of America

Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution (in case of 100BaseTX environment):

Properly shielded and grounded cables (STP) and connectors must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

Declaration of Conformity

Product Name: Color Scanner

Model Number: Ricoh Aficio Color Scanner IS330DC

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received,

including interference that may cause undesired operation.

Properly shielded cables must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

Network interface cable with ferrite core must be used for RF interference suppression.

Note to users in Canada

Note:

This Class B digital apparatus complies with Canadian ICES-003.

Remarque concernant les utilisateurs au Canada

Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

In accordance with IEC 60417, this machine uses the following symbols for the main power switch:

| means POWER ON.

O means POWER OFF.

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Color Scanner Operating Instructions

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